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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,768	07/30/2003	Akira Katou	1614.1354	7690

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STAAS & HALSEY LLP
SUITE 700
1201 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER
DWIVEDI, MAHESH.H

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/629,768	KATOU ET AL.
	Examiner	Art Unit	
	Mahesh H. Dwivedi	2168	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _20 February 2007_.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-23_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-23_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _20 July 2003_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☒ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Remarks

1.   Receipt of Applicant's Amendment, filed on 02/26/07, is acknowledged. The amendment includes the amending of claims 1-11. The examiner further wishes to state that foreign priority of 09/19/2002 is accepted in the instant application.

Priority

2.   Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 101

3.   The rejections raised in the office action mailed on 09/19/2006 have been overcome by applicants amendments received on 02/20/2007.

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5.   Claims 1-3, 5-8, 10-13, 15-18, and 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Fujieda** (U.S. PGPUB 2001/0007997) in view of **Weinberg et al.** (U.S. Patent 6,144,962).

6.   Regarding claim 1, **Fujieda** teaches a system comprising:

A) a storage section, formed by hardware, and configured to store file information in units of generations (Paragraphs 143-144, 146-150, Figures 9-10);

B) each file information having different generations before and after a modification by an editing process (Paragraphs 143-144, 146-150, Figures 9-10);

C) an inter-file correspondence table, formed by hardware, and configured to store corresponding relationships of the file information stored in the storage, including generation information (Paragraphs 121-122, 143-144, 146-150, Figures 7, and 9-10); and

E) a processing unit configured to refer to the inter-file correspondence table to display relationships of the file information corresponding to the icon data (Paragraphs 143-144, 146-150, Figures 9-10);

F) wherein a modification of one of two related file information by the editing process affects other of the two related file information, including generation information (Paragraphs 121-122, and 146-148, Figures 7, and 9-10).

The examiner notes that **Fujieda** teaches "**a storage section, formed by hardware, and configured to store file information in units of generations**" as "In this embodiment, different phases are set for a model and the version number is assigned to each phase, thus making it possible to manage the model by the phase. In the illustrated example, a model A has three kinds of phase, phases #1 to #3, and the version number starting with "1" is assigned to each phase. By thus generating an independent version number for each phase for the management of the model, it is possible to acquire target data by using the phase as a clue" (Paragraphs 143-144) and "The PDM configuration view screen shows the latest phase, but it is also possible to display a plurality of phases on screen at the same time by executing a predetermined command etc. through operation of the input device 41. Such a screen is shown in FIG. 11, by way of example. In the illustrated example, "Rear Suspension Ph1" relating to

phase #1 and "Rear Suspension Ph2" relating to phase #2 are shown on the same screen. This display screen permits the part or unit of a previous phase to be looked up with ease" (Paragraphs 149-150). The examiner further wishes to state that Figure 10 of **Fujieda** clearly shows multiple versions of the same part (Rear Cushion 1 in Phase 1 and Rear Cushion 2 in Phase 2). The examiner further notes that **Fujieda** teaches **"each file information having different generations before and after a modification by an editing process"** as "In this embodiment, different phases are set for a model and the version number is assigned to each phase, thus making it possible to manage the model by the phase. In the illustrated example, a model A has three kinds of phase, phases #1 to #3, and the version number starting with "1" is assigned to each phase. By thus generating an independent version number for each phase for the management of the model, it is possible to acquire target data by using the phase as a clue" (Paragraphs 143-144) and "The PDM configuration view screen shows the latest phase, but it is also possible to display a plurality of phases on screen at the same time by executing a predetermined command etc. through operation of the input device 41. Such a screen is shown in FIG. 11, by way of example. In the illustrated example, "Rear Suspension Ph1" relating to phase #1 and "Rear Suspension Ph2" relating to phase #2 are shown on the same screen. This display screen permits the part or unit of a previous phase to be looked up with ease" (Paragraphs 149-150). The examiner further wishes to state that Figure 10 of **Fujieda** clearly shows multiple versions of the same part (Rear Cushion 1 in Phase 1 and Rear Cushion 2 in Phase 2). The examiner further notes that **Fujieda** teaches **"an inter-file correspondence table, formed by hardware, and configured to store corresponding relationships of the file information stored in the storage, including generation information"** as "If, in the three-view drawing, the content of the part column 60a or of the title columns 60b is modified, the CPU 40a detects such modification and simultaneously modifies the attribute data assigned to the corresponding model stored in the HDD 40d as well as the content shown in the attribute view. In cases where the attribute data assigned to the model has been modified, the part column 60a and title columns 60b of the three-view drawing and also the display content of the attribute view are simultaneously

modified" (Paragraphs 121-122), "In this embodiment, different phases are set for a model and the version number is assigned to each phase, thus making it possible to manage the model by the phase. In the illustrated example, a model A has three kinds of phase, phases #1 to #3, and the version number starting with "1" is assigned to each phase. By thus generating an independent version number for each phase for the management of the model, it is possible to acquire target data by using the phase as a clue" (Paragraphs 143-144), and "The PDM configuration view screen shows the latest phase, but it is also possible to display a plurality of phases on screen at the same time by executing a predetermined command etc. through operation of the input device 41. Such a screen is shown in FIG. 11, by way of example. In the illustrated example, "Rear Suspension Ph1" relating to phase #1 and "Rear Suspension Ph2" relating to phase #2 are shown on the same screen. This display screen permits the part or unit of a previous phase to be looked up with ease" (Paragraphs 149-150). The examiner further notes that **Fujieda** teaches **"a processing unit configured to refer to the inter-file correspondence table to display relationships of the file information corresponding to the icon data"** as "In this embodiment, different phases are set for a model and the version number is assigned to each phase, thus making it possible to manage the model by the phase. In the illustrated example, a model A has three kinds of phase, phases #1 to #3, and the version number starting with "1" is assigned to each phase. By thus generating an independent version number for each phase for the management of the model, it is possible to acquire target data by using the phase as a clue" (Paragraphs 143-144) and "The PDM configuration view screen shows the latest phase, but it is also possible to display a plurality of phases on screen at the same time by executing a predetermined command etc. through operation of the input device 41. Such a screen is shown in FIG. 11, by way of example. In the illustrated example, "Rear Suspension Ph1" relating to phase #1 and "Rear Suspension Ph2" relating to phase #2 are shown on the same screen. This display screen permits the part or unit of a previous phase to be looked up with ease" (Paragraphs 149-150). The examiner further wishes to state that Figure 10 of **Fujieda** clearly shows the relationship of the various parts in a tree structure with both Phase 1 and Phase 2. The examiner further notes

that **Fujieda** teaches "**wherein a modification of one of two related file information by the editing process affects other of the two related file information, including generation information**" as "If, in the three-view drawing, the content of the part column 60a or of the title columns 60b is modified, the CPU 40a detects such modification and simultaneously modifies the attribute data assigned to the corresponding model stored in the HDD 40d as well as the content shown in the attribute view. In cases where the attribute data assigned to the model has been modified, the part column 60a and title columns 60b of the three-view drawing and also the display content of the attribute view are simultaneously modified" (Paragraphs 121-122), and "If, in a PDM configuration view shown in FIG. 10, trial manufacture of "Rear Suspension", for example, is requested, the CPU 40a judges that a transition of phases has occurred. Accordingly, the CPU registers the bulk data of the rear suspension in the HDD 40d as phase-#1 bulk data, prohibits modification or revision of the bulk data, and sets the status of the bulk data to "Master". Subsequently, the CPU 40a copies the phase-#1 bulk data of the rear suspension to a predetermined area of the HDD 40d and sets the copy as phase #2. All subsequent revisions are made with respect to the phase-#2 data" (Paragraphs 146-147).

Fujieda does not explicitly teach:

D) an icon storage, formed by hardware, and configured to store icon data corresponding to the file information; and

E) a processing unit configured to refer to the icon storage and to display, on the display unit, icon data of the file information stored in the storage section in units of generations.

Weinberg, however, teaches "**an icon storage, formed by hardware, and configured to store icon data corresponding to the file information**" as "A recursive layout method is then applied which uses the parent-child node relationships, as such relationships exist within the tree, to spatially position the nodes (represented as respective icons within the map)" (Column 2, lines 37-41) and "As generally illustrated by FIGS. 3 and 4, different icons are used to represent the different URL types when the nodes are viewed in a sufficiently zoomed-in mode" (Column 8, lines 51-

53, Figures 3-4) and **"a processing unit configured to refer to the icon storage and to display, on the display unit, icon data of the file information stored in the storage section in units of generations"** as "A recursive layout method is then applied which uses the parent-child node relationships, as such relationships exist within the tree, to spatially position the nodes (represented as respective icons within the map)" (Column 2, lines 37-41), "As generally illustrated by FIGS. 3 and 4, different icons are used to represent the different URL types when the nodes are viewed in a sufficiently zoomed-in mode" (Column 8, lines 51-53, Figures 3-4), and "FIG. 21 illustrates a screen display...can selectively display the following: new URLs and links, modified URLs, deleted URLs and links, and unmodified URLs and links" (Column 30, lines 28-38).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Weinberg's** would have allowed **Fujieda's** to provide a method for improving graphical navigation through the visualization of icons, as noted by **Weinberg** (Column 1, lines 46-60).

Regarding claim 2, **Fujieda** further teaches a system comprising:
A) an input controller <u>configured</u> to detect an input to the CAD generation management system (Paragraphs 145-150, Figure 10); and
B) said <u>processing</u> unit displaying <u>on the display unit</u> the relationships of selected icon data with emphasis when the input controller detects an input selecting the selected icon data from the displayed icon data (Paragraphs 145-150, Figure 10).

The examiner notes that **Fujieda** teaches **"an input controller configured to detect an input to the CAD generation management system"** as "The PDM configuration view screen shows the latest phase, but it is also possible to display a plurality of phases on screen at the same time by executing a predetermined command etc. through operation of the input device 41. Such a screen is shown in FIG. 11, by way of example. In the illustrated example, "Rear Suspension Ph1" relating to phase #1 and "Rear Suspension Ph2" relating to phase #2 are shown on the same screen. This

display screen permits the part or unit of a previous phase to be looked up with ease"
(Paragraphs 149-150). The examiner further notes that Figure 10 clearly shows that as
a result of a user action to the rear-suspension button in interface 70, interfaces 71 and
72 appear. The examiner further notes that **Fujieda** teaches **"said processing unit
displaying on the display unit the relationships of selected icon data with
emphasis when the input controller detects an input selecting the selected icon
data from the displayed icon data"** as "The PDM configuration view screen shows the
latest phase, but it is also possible to display a plurality of phases on screen at the
same time by executing a predetermined command etc. through operation of the input
device 41. Such a screen is shown in FIG. 11, by way of example. In the illustrated
example, "Rear Suspension Ph1" relating to phase #1 and "Rear Suspension Ph2"
relating to phase #2 are shown on the same screen. This display screen permits the
part or unit of a previous phase to be looked up with ease" (Paragraphs 149-150). The
examiner further notes that Figure 10 clearly shows that as a result of a user action to
the rear-suspension button in interface 70, interfaces 71 and 72 appear.

Regarding claim 3, **Fujieda** further teaches a system comprising:
A) wherein the processing unit displays on the display unit the relationships of the file
information corresponding to the icon data by lines connecting related icon data
(Paragraphs 145-150, Figure 10).

The examiner further notes that **Fujieda** teaches **"wherein the processing unit
displays on the display unit the relationships of the file information
corresponding to the icon data by lines connecting related icon data"** as "The
PDM configuration view screen shows the latest phase, but it is also possible to display
a plurality of phases on screen at the same time by executing a predetermined
command etc. through operation of the input device 41. Such a screen is shown in FIG.
11, by way of example. In the illustrated example, "Rear Suspension Ph1" relating to
phase #1 and "Rear Suspension Ph2" relating to phase #2 are shown on the same
screen. This display screen permits the part or unit of a previous phase to be looked up
with ease" (Paragraphs 149-150). The examiner further notes that Figure 10 clearly

shows a tree structure with respect to phases 1 and 2, both of which contain lines depicting various relationships.

Regarding claim 5, **Fujieda** further teaches a system comprising:

A) means for acquiring a CAD program and/or the file information via one or more networks (Paragraphs 42 and 65, Figure 1).

The examiner notes that **Fujieda** teaches **"means for acquiring a CAD program and/or the file information via one or more networks"** as "When bulk data of a certain model is necessary, an inquiry is made with respect to the first server 1, and the corresponding meta-data and decryption key are acquired and transmitted to the terminal which has made the request. Accordingly, bulk data, which has a vast amount of information, need not be transferred from the second server to the first server 1, and thus the network can be prevented from being overloaded" (Paragraph 65). The examiner further wishes to state that Figure 1 clearly shows various terminals 3-1, 3-2, and 3-3 having network access to CAD material located on servers 1 and 2.

Regarding claim 6, **Fujieda** teaches a system comprising:

A) a storage section, formed by hardware, and configured to store font information in units of generations (Paragraphs 143-144, 146-150, Figures 9-10);

C) a third storage, formed by hardware, and configured to store the generation information of the file information, each file information having different generations before and after a modification by an editing process (Paragraphs 143-144, 146-150, Figures 9-10);

D) a processing unit configured to refer to the generation information stored in the third storage in response to an instruction to display generation information of target file information (Paragraphs 143-144, 146-150, Figures 9-10);

F) wherein a modification of one of two related file information by the editing process affects other of the two related file information, including the generation information (Paragraphs 121-122, and 146-148, Figures 7, and 9-10).

The examiner notes that **Fujieda** teaches **"a storage section, formed by**
hardware, and configured to store font information in units of generations" as "In
this embodiment, different phases are set for a model and the version number is
assigned to each phase, thus making it possible to manage the model by the phase. In
the illustrated example, a model A has three kinds of phase, phases #1 to #3, and the
version number starting with "1" is assigned to each phase. By thus generating an
independent version number for each phase for the management of the model, it is
possible to acquire target data by using the phase as a clue" (Paragraphs 143-144) and
"The PDM configuration view screen shows the latest phase, but it is also possible to
display a plurality of phases on screen at the same time by executing a predetermined
command etc. through operation of the input device 41. Such a screen is shown in FIG.
11, by way of example. In the illustrated example, "Rear Suspension Ph1" relating to
phase #1 and "Rear Suspension Ph2" relating to phase #2 are shown on the same
screen. This display screen permits the part or unit of a previous phase to be looked up
with ease" (Paragraphs 149-150). The examiner further wishes to state that Figure 10
of **Fujieda** clearly shows multiple versions of the same part (Rear Cushion 1 in Phase 1
and Rear Cushion 2 in Phase 2). The examiner further notes that **Fujieda** teaches **"a**
third storage, formed by hardware, and configured to store the generation
information of the file information, each file information having different
generations before and after a modification by an editing process" as "In this
embodiment, different phases are set for a model and the version number is assigned to
each phase, thus making it possible to manage the model by the phase. In the
illustrated example, a model A has three kinds of phase, phases #1 to #3, and the
version number starting with "1" is assigned to each phase. By thus generating an
independent version number for each phase for the management of the model, it is
possible to acquire target data by using the phase as a clue" (Paragraphs 143-144) and
"The PDM configuration view screen shows the latest phase, but it is also possible to
display a plurality of phases on screen at the same time by executing a predetermined
command etc. through operation of the input device 41. Such a screen is shown in FIG.
11, by way of example. In the illustrated example, "Rear Suspension Ph1" relating to

phase #1 and "Rear Suspension Ph2" relating to phase #2 are shown on the same screen. This display screen permits the part or unit of a previous phase to be looked up with ease" (Paragraphs 149-150). The examiner further wishes to state that Figure 10 of **Fujieda** clearly shows multiple versions of the same part (Rear Cushion 1 in Phase 1 and Rear Cushion 2 in Phase 2). The examiner further notes that **Fujieda** teaches **"a processing unit configured to refer to the generation information stored in the third storage in response to an instruction to display generation information of target file information"** as "In this embodiment, different phases are set for a model and the version number is assigned to each phase, thus making it possible to manage the model by the phase. In the illustrated example, a model A has three kinds of phase, phases #1 to #3, and the version number starting with "1" is assigned to each phase. By thus generating an independent version number for each phase for the management of the model, it is possible to acquire target data by using the phase as a clue" (Paragraphs 143-144) and "The PDM configuration view screen shows the latest phase, but it is also possible to display a plurality of phases on screen at the same time by executing a predetermined command etc. through operation of the input device 41. Such a screen is shown in FIG. 11, by way of example. In the illustrated example, "Rear Suspension Ph1" relating to phase #1 and "Rear Suspension Ph2" relating to phase #2 are shown on the same screen. This display screen permits the part or unit of a previous phase to be looked up with ease" (Paragraphs 149-150). The examiner further wishes to state that Figure 10 of **Fujieda** clearly shows the relationship of the various parts in a tree structure with both Phase 1 and Phase 2. The examiner further notes that **Fujieda** teaches **"wherein a modification of one of two related file information by the editing process affects other of the two related file information, including the generation information"** as "If, in the three-view drawing, the content of the part column 60a or of the title columns 60b is modified, the CPU 40a detects such modification and simultaneously modifies the attribute data assigned to the corresponding model stored in the HDD 40d as well as the content shown in the attribute view. In cases where the attribute data assigned to the model has been modified, the part column 60a and title columns 60b of the three-view drawing and also

the display content of the attribute view are simultaneously modified" (Paragraphs 121-122), and "If, in a PDM configuration view shown in FIG. 10, trial manufacture of "Rear Suspension", for example, is requested, the CPU 40a judges that a transition of phases has occurred. Accordingly, the CPU registers the bulk data of the rear suspension in the HDD 40d as phase-#1 bulk data, prohibits modification or revision of the bulk data, and sets the status of the bulk data to "Master". Subsequently, the CPU 40a copies the phase-#1 bulk data of the rear suspension to a predetermined area of the HDD 40d and sets the copy as phase #2. All subsequent revisions are made with respect to the phase-#2 data" (Paragraphs 146-147).

Fujieda does not explicitly teach:

B) a second storage, formed by hardware, and configured to store icon data indicating file information; and

E) a processing unit configured to create and display, on the display unit, the icon data related to the generation information to be displayed on the display unit by combining the font information stored in the first storage and the icon data stored in the second storage

Weinberg, however, teaches **"a second storage, formed by hardware, and configured to store icon data indicating file information"** as "A recursive layout method is then applied which uses the parent-child node relationships, as such relationships exist within the tree, to spatially position the nodes (represented as respective icons within the map)" (Column 2, lines 37-41) and "As generally illustrated by FIGS. 3 and 4, different icons are used to represent the different URL types when the nodes are viewed in a sufficiently zoomed-in mode" (Column 8, lines 51-53, Figures 3-4) and **"a processing unit configured to create and display, on the display unit, the icon data related to the generation information to be displayed on the display unit by combining the font information stored in the first storage and the icon data stored in the second storage"** as "A recursive layout method is then applied which uses the parent-child node relationships, as such relationships exist within the tree, to spatially position the nodes (represented as respective icons within the map)" (Column 2, lines 37-41), "As generally illustrated by FIGS. 3 and 4, different icons are

used to represent the different URL types when the nodes are viewed in a sufficiently zoomed-in mode" (Column 8, lines 51-53, Figures 3-4), and "FIG. 21 illustrates a screen display...can selectively display the following: new URLs and links, modified URLs, deleted URLs and links, and unmodified URLs and links" (Column 30, lines 28-38).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Weinberg's** would have allowed **Fujieda's** to provide a method for improving graphical navigation through the visualization of icons, as noted by **Weinberg** (Column 1, lines 46-60).

Regarding claim 7, **Fujieda** further teaches a system comprising:

A) an input controller <u>configured</u> to detect an input to the CAD generation management system, including the instruction (Paragraphs 145-150, Figure 10); and

B) said <u>processing</u> unit displaying <u>on the display unit</u> the relationships of selected icon data with emphasis when the input controller detects an input selecting the selected icon data from the displayed icon data (Paragraphs 145-150, Figure 10).

The examiner notes that **Fujieda** teaches **"an input controller <u>configured</u> to detect an input to the CAD generation management system, including the instruction"** as "The PDM configuration view screen shows the latest phase, but it is also possible to display a plurality of phases on screen at the same time by executing a predetermined command etc. through operation of the input device 41. Such a screen is shown in FIG. 11, by way of example. In the illustrated example, "Rear Suspension Ph1" relating to phase #1 and "Rear Suspension Ph2" relating to phase #2 are shown on the same screen. This display screen permits the part or unit of a previous phase to be looked up with ease" (Paragraphs 149-150). The examiner further notes that Figure 10 clearly shows that as a result of a user action to the rear-suspension button in interface 70, interfaces 71 and 72 appear. The examiner further notes that **Fujieda** teaches **"said <u>processing</u> unit displaying <u>on the display unit</u> the relationships of selected icon data with emphasis when the input controller detects an input selecting the selected icon data from the displayed icon data"** as "The PDM

configuration view screen shows the latest phase, but it is also possible to display a plurality of phases on screen at the same time by executing a predetermined command etc. through operation of the input device 41. Such a screen is shown in FIG. 11, by way of example. In the illustrated example, "Rear Suspension Ph1" relating to phase #1 and "Rear Suspension Ph2" relating to phase #2 are shown on the same screen. This display screen permits the part or unit of a previous phase to be looked up with ease" (Paragraphs 149-150). The examiner further notes that Figure 10 clearly shows that as a result of a user action to the rear-suspension button in interface 70, interfaces 71 and 72 appear.

Regarding claim 8, **Fujieda** further teaches a system comprising:

A) wherein the <u>processing</u> unit displays <u>on the display unit</u> the relationships of the file information corresponding to the icon data by lines connecting related icon data (Paragraphs 145-150, Figure 10).

The examiner further notes that **Fujieda** teaches **"wherein the <u>processing</u> unit displays <u>on the display unit</u> the relationships of the file information corresponding to the icon data by lines connecting related icon data"** as "The PDM configuration view screen shows the latest phase, but it is also possible to display a plurality of phases on screen at the same time by executing a predetermined command etc. through operation of the input device 41. Such a screen is shown in FIG. 11, by way of example. In the illustrated example, "Rear Suspension Ph1" relating to phase #1 and "Rear Suspension Ph2" relating to phase #2 are shown on the same screen. This display screen permits the part or unit of a previous phase to be looked up with ease" (Paragraphs 149-150). The examiner further notes that Figure 10 clearly shows a tree structure with respect to phases 1 and 2, both of which contain lines depicting various relationships.

Regarding claim 10, **Fujieda** further teaches a system comprising:

A) means for acquiring a CAD program and/or the file information via one or more networks (Paragraphs 42 and 65, Figure 1).

The examiner notes that **Fujieda** teaches **"means for acquiring a CAD program and/or the file information via one or more networks"** as "When bulk data of a certain model is necessary, an inquiry is made with respect to the first server 1, and the corresponding meta-data and decryption key are acquired and transmitted to the terminal which has made the request. Accordingly, bulk data, which has a vast amount of information, need not be transferred from the second server to the first server 1, and thus the network can be prevented from being overloaded" (Paragraph 65). The examiner further wishes to state that Figure 1 clearly shows various terminals 3-1, 3-2, and 3-3 having network access to CAD material located on servers 1 and 2.

Regarding claim 11, **Fujieda** teaches a computer-readable storage medium comprising:

A) a procedure to cause the computer to store file information I a storage in units of generations (Paragraphs 143-144, 146-150, Figures 9-10);

B) each file information having different generations before and after a modification by an editing process (Paragraphs 143-144, 146-150, Figures 9-10);

C) a procedure to cause the computer to store corresponding relationships of the file information stored in the storage, including generation information, in an inter-file correspondence table (Paragraphs 121-122, 143-144, 146-150, Figures 7, and 9-10); and

E) a control procedure to cause the computer to refer to the inter-file correspondence table to display relationships of the file information corresponding to the icon data (Paragraphs 143-144, 146-150, Figures 9-10);

F) an editing procedure to cause the computer to carry out the editing process in which a modification of one of two related file information affects other of the two related file information, including generation information (Paragraphs 121-122, and 146-148, Figures 7, and 9-10).

The examiner notes that **Fujieda** teaches **"a procedure to cause the computer to store file information I a storage in units of generations"** as "In this embodiment, different phases are set for a model and the version number is assigned to each phase,

thus making it possible to manage the model by the phase. In the illustrated example, a model A has three kinds of phase, phases #1 to #3, and the version number starting with "1" is assigned to each phase. By thus generating an independent version number for each phase for the management of the model, it is possible to acquire target data by using the phase as a clue" (Paragraphs 143-144) and "The PDM configuration view screen shows the latest phase, but it is also possible to display a plurality of phases on screen at the same time by executing a predetermined command etc. through operation of the input device 41. Such a screen is shown in FIG. 11, by way of example. In the illustrated example, "Rear Suspension Ph1" relating to phase #1 and "Rear Suspension Ph2" relating to phase #2 are shown on the same screen. This display screen permits the part or unit of a previous phase to be looked up with ease" (Paragraphs 149-150). The examiner further wishes to state that Figure 10 of **Fujieda** clearly shows multiple versions of the same part (Rear Cushion 1 in Phase 1 and Rear Cushion 2 in Phase 2). The examiner further notes that **Fujieda** teaches **"each file information having different generations before and after a modification by an editing process"** as "In this embodiment, different phases are set for a model and the version number is assigned to each phase, thus making it possible to manage the model by the phase. In the illustrated example, a model A has three kinds of phase, phases #1 to #3, and the version number starting with "1" is assigned to each phase. By thus generating an independent version number for each phase for the management of the model, it is possible to acquire target data by using the phase as a clue" (Paragraphs 143-144) and "The PDM configuration view screen shows the latest phase, but it is also possible to display a plurality of phases on screen at the same time by executing a predetermined command etc. through operation of the input device 41. Such a screen is shown in FIG. 11, by way of example. In the illustrated example, "Rear Suspension Ph1" relating to phase #1 and "Rear Suspension Ph2" relating to phase #2 are shown on the same screen. This display screen permits the part or unit of a previous phase to be looked up with ease" (Paragraphs 149-150). The examiner further wishes to state that Figure 10 of **Fujieda** clearly shows multiple versions of the same part (Rear Cushion 1 in Phase 1 and Rear Cushion 2 in Phase 2). The examiner further notes that **Fujieda** teaches **"a**

procedure to cause the computer to store corresponding relationships of the file information stored in the storage, including generation information, in an inter-file correspondence table" as "If, in the three-view drawing, the content of the part column 60a or of the title columns 60b is modified, the CPU 40a detects such modification and simultaneously modifies the attribute data assigned to the corresponding model stored in the HDD 40d as well as the content shown in the attribute view. In cases where the attribute data assigned to the model has been modified, the part column 60a and title columns 60b of the three-view drawing and also the display content of the attribute view are simultaneously modified" (Paragraphs 121-122), "In this embodiment, different phases are set for a model and the version number is assigned to each phase, thus making it possible to manage the model by the phase. In the illustrated example, a model A has three kinds of phase, phases #1 to #3, and the version number starting with "1" is assigned to each phase. By thus generating an independent version number for each phase for the management of the model, it is possible to acquire target data by using the phase as a clue" (Paragraphs 143-144), and "The PDM configuration view screen shows the latest phase, but it is also possible to display a plurality of phases on screen at the same time by executing a predetermined command etc. through operation of the input device 41. Such a screen is shown in FIG. 11, by way of example. In the illustrated example, "Rear Suspension Ph1" relating to phase #1 and "Rear Suspension Ph2" relating to phase #2 are shown on the same screen. This display screen permits the part or unit of a previous phase to be looked up with ease" (Paragraphs 149-150). The examiner further notes that **Fujieda** teaches **"a control procedure to cause the computer to refer to the inter-file correspondence table to display relationships of the file information corresponding to the icon data"** as "In this embodiment, different phases are set for a model and the version number is assigned to each phase, thus making it possible to manage the model by the phase. In the illustrated example, a model A has three kinds of phase, phases #1 to #3, and the version number starting with "1" is assigned to each phase. By thus generating an independent version number for each phase for the management of the model, it is possible to acquire target data by using the phase as a clue" (Paragraphs 143-144) and "The PDM configuration view

screen shows the latest phase, but it is also possible to display a plurality of phases on screen at the same time by executing a predetermined command etc. through operation of the input device 41. Such a screen is shown in FIG. 11, by way of example. In the illustrated example, "Rear Suspension Ph1" relating to phase #1 and "Rear Suspension Ph2" relating to phase #2 are shown on the same screen. This display screen permits the part or unit of a previous phase to be looked up with ease" (Paragraphs 149-150). The examiner further wishes to state that Figure 10 of **Fujieda** clearly shows the relationship of the various parts in a tree structure with both Phase 1 and Phase 2. The examiner further notes that **Fujieda** teaches "**an editing procedure to cause the computer to carry out the editing process in which a modification of one of two related file information affects other of the two related file information, including generation information**" as "If, in the three-view drawing, the content of the part column 60a or of the title columns 60b is modified, the CPU 40a detects such modification and simultaneously modifies the attribute data assigned to the corresponding model stored in the HDD 40d as well as the content shown in the attribute view. In cases where the attribute data assigned to the model has been modified, the part column 60a and title columns 60b of the three-view drawing and also the display content of the attribute view are simultaneously modified" (Paragraphs 121-122), and "If, in a PDM configuration view shown in FIG. 10, trial manufacture of "Rear Suspension", for example, is requested, the CPU 40a judges that a transition of phases has occurred. Accordingly, the CPU registers the bulk data of the rear suspension in the HDD 40d as phase-#1 bulk data, prohibits modification or revision of the bulk data, and sets the status of the bulk data to "Master". Subsequently, the CPU 40a copies the phase-#1 bulk data of the rear suspension to a predetermined area of the HDD 40d and sets the copy as phase #2. All subsequent revisions are made with respect to the phase-#2 data" (Paragraphs 146-147).

Fujieda does not explicitly teach:

D) a procedure to cause the computer to store icon data corresponding to the file information in an icon storage; and

E) a control procedure to cause the computer to refer to the inter-file correspondence table and the icon storage and to display icon data of the file information stored in the storage section in units of generations.

Weinberg, however, teaches **"a procedure to cause the computer to store icon data corresponding to the file information in an icon storage"** as "A recursive layout method is then applied which uses the parent-child node relationships, as such relationships exist within the tree, to spatially position the nodes (represented as respective icons within the map)" (Column 2, lines 37-41) and "As generally illustrated by FIGS. 3 and 4, different icons are used to represent the different URL types when the nodes are viewed in a sufficiently zoomed-in mode" (Column 8, lines 51-53, Figures 3-4) and **"a control procedure to cause the computer to refer to the inter-file correspondence table and the icon storage and to display icon data of the file information stored in the storage section in units of generations"** as "A recursive layout method is then applied which uses the parent-child node relationships, as such relationships exist within the tree, to spatially position the nodes (represented as respective icons within the map)" (Column 2, lines 37-41), "As generally illustrated by FIGS. 3 and 4, different icons are used to represent the different URL types when the nodes are viewed in a sufficiently zoomed-in mode" (Column 8, lines 51-53, Figures 3-4), and "FIG. 21 illustrates a screen display...can selectively display the following: new URLs and links, modified URLs, deleted URLs and links, and unmodified URLs and links" (Column 30, lines 28-38).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Weinberg's** would have allowed **Fujieda's** to provide a method for improving graphical navigation through the visualization of icons, as noted by **Weinberg** (Column 1, lines 46-60).

Regarding claim 12, **Fujieda** further teaches a computer-readable storage medium comprising:

A) an input procedure to cause the computer to detect an input to the computer
(Paragraphs 145-150, Figure 10); and

B) said control procedure causing the computer to display the relationships of selected
icon data with emphasis when the input controller detects an input selecting the
selected icon data from the displayed icon data (Paragraphs 145-150, Figure 10).

The examiner notes that **Fujieda** teaches **"an input procedure to cause the
computer to detect an input to the computer"** as "The PDM configuration view
screen shows the latest phase, but it is also possible to display a plurality of phases on
screen at the same time by executing a predetermined command etc. through operation
of the input device 41. Such a screen is shown in FIG. 11, by way of example. In the
illustrated example, "Rear Suspension Ph1" relating to phase #1 and "Rear Suspension
Ph2" relating to phase #2 are shown on the same screen. This display screen permits
the part or unit of a previous phase to be looked up with ease" (Paragraphs 149-150).
The examiner further notes that Figure 10 clearly shows that as a result of a user action
to the rear-suspension button in interface 70, interfaces 71 and 72 appear. The
examiner further notes that **Fujieda** teaches **"said control procedure causing the
computer to display the relationships of selected icon data with emphasis when
the input controller detects an input selecting the selected icon data from the
displayed icon data"** as "The PDM configuration view screen shows the latest phase,
but it is also possible to display a plurality of phases on screen at the same time by
executing a predetermined command etc. through operation of the input device 41.
Such a screen is shown in FIG. 11, by way of example. In the illustrated example, "Rear
Suspension Ph1" relating to phase #1 and "Rear Suspension Ph2" relating to phase #2
are shown on the same screen. This display screen permits the part or unit of a
previous phase to be looked up with ease" (Paragraphs 149-150). The examiner further
notes that Figure 10 clearly shows that as a result of a user action to the rear-
suspension button in interface 70, interfaces 71 and 72 appear.

Regarding claim 13, **Fujieda** further teaches a computer readable storage
medium comprising:

A) wherein the control procedure causes the computer to display the relationships of the file information corresponding to the icon data by lines connecting related icon data (Paragraphs 145-150, Figure 10).

The examiner further notes that **Fujieda** teaches **"wherein the control procedure causes the computer to display the relationships of the file information corresponding to the icon data by lines connecting related icon data"** as "The PDM configuration view screen shows the latest phase, but it is also possible to display a plurality of phases on screen at the same time by executing a predetermined command etc. through operation of the input device 41. Such a screen is shown in FIG. 11, by way of example. In the illustrated example, "Rear Suspension Ph1" relating to phase #1 and "Rear Suspension Ph2" relating to phase #2 are shown on the same screen. This display screen permits the part or unit of a previous phase to be looked up with ease" (Paragraphs 149-150). The examiner further notes that Figure 10 clearly shows a tree structure with respect to phases 1 and 2, both of which contain lines depicting various relationships.

Regarding claim 15, **Fujieda** further teaches a computer readable storage medium comprising:

A) a procedure to cause the computer to acquire a CAD program and/or the file information via one or more networks (Paragraphs 42 and 65, Figure 1).

The examiner notes that **Fujieda** teaches **"a procedure to cause the computer to acquire a CAD program and/or the file information via one or more networks"** as "When bulk data of a certain model is necessary, an inquiry is made with respect to the first server 1, and the corresponding meta-data and decryption key are acquired and transmitted to the terminal which has made the request. Accordingly, bulk data, which has a vast amount of information, need not be transferred from the second server to the first server 1, and thus the network can be prevented from being overloaded" (Paragraph 65). The examiner further wishes to state that Figure 1 clearly shows various terminals 3-1, 3-2, and 3-3 having network access to CAD material located on servers 1 and 2.

Regarding claim 16, **Fujieda** teaches a computer storage medium comprising:

A) a procedure to cause the computer to store font information indicating generation information in a first storage (Paragraphs 143-144, 146-150, Figures 9-10);

C) a procedure to cause the computer to store the generation information of the file information in a third storage, each file information having different generations before and after a modification by an editing process (Paragraphs 143-144, 146-150, Figures 9-10);

D) a control procedure to cause the computer to refer to the generation information stored in the third storage in response to an instruction to display information of target file information (Paragraphs 143-144, 146-150, Figures 9-10);

F) an editing procedure to cause the computer to carry out the editing process in which a modification of one of two related file information affects other of the two related file information, including generation information (Paragraphs 121-122, and 146-148, Figures 7, and 9-10).

The examiner notes that **Fujieda** teaches "**a procedure to cause the computer to store font information indicating generation information in a first storage**" as "In this embodiment, different phases are set for a model and the version number is assigned to each phase, thus making it possible to manage the model by the phase. In the illustrated example, a model A has three kinds of phase, phases #1 to #3, and the version number starting with "1" is assigned to each phase. By thus generating an independent version number for each phase for the management of the model, it is possible to acquire target data by using the phase as a clue" (Paragraphs 143-144) and "The PDM configuration view screen shows the latest phase, but it is also possible to display a plurality of phases on screen at the same time by executing a predetermined command etc. through operation of the input device 41. Such a screen is shown in FIG. 11, by way of example. In the illustrated example, "Rear Suspension Ph1" relating to phase #1 and "Rear Suspension Ph2" relating to phase #2 are shown on the same screen. This display screen permits the part or unit of a previous phase to be looked up with ease" (Paragraphs 149-150). The examiner further wishes to state that Figure 10

of **Fujieda** clearly shows multiple versions of the same part (Rear Cushion 1 in Phase 1 and Rear Cushion 2 in Phase 2). The examiner further notes that **Fujieda** teaches **"a procedure to cause the computer to store the generation information of the file information in a third storage, each file information having different generations before and after a modification by an editing process"** as "In this embodiment, different phases are set for a model and the version number is assigned to each phase, thus making it possible to manage the model by the phase. In the illustrated example, a model A has three kinds of phase, phases #1 to #3, and the version number starting with "1" is assigned to each phase. By thus generating an independent version number for each phase for the management of the model, it is possible to acquire target data by using the phase as a clue" (Paragraphs 143-144) and "The PDM configuration view screen shows the latest phase, but it is also possible to display a plurality of phases on screen at the same time by executing a predetermined command etc. through operation of the input device 41. Such a screen is shown in FIG. 11, by way of example. In the illustrated example, "Rear Suspension Ph1" relating to phase #1 and "Rear Suspension Ph2" relating to phase #2 are shown on the same screen. This display screen permits the part or unit of a previous phase to be looked up with ease" (Paragraphs 149-150). The examiner further wishes to state that Figure 10 of **Fujieda** clearly shows multiple versions of the same part (Rear Cushion 1 in Phase 1 and Rear Cushion 2 in Phase 2). The examiner further notes that **Fujieda** teaches **"a control procedure to cause the computer to refer to the generation information stored in the third storage in response to an instruction to display information of target file information"** as "In this embodiment, different phases are set for a model and the version number is assigned to each phase, thus making it possible to manage the model by the phase. In the illustrated example, a model A has three kinds of phase, phases #1 to #3, and the version number starting with "1" is assigned to each phase. By thus generating an independent version number for each phase for the management of the model, it is possible to acquire target data by using the phase as a clue" (Paragraphs 143-144) and "The PDM configuration view screen shows the latest phase, but it is also possible to display a plurality of phases on screen at the same time by executing a predetermined

command etc. through operation of the input device 41. Such a screen is shown in FIG. 11, by way of example. In the illustrated example, "Rear Suspension Ph1" relating to phase #1 and "Rear Suspension Ph2" relating to phase #2 are shown on the same screen. This display screen permits the part or unit of a previous phase to be looked up with ease" (Paragraphs 149-150). The examiner further wishes to state that Figure 10 of **Fujieda** clearly shows the relationship of the various parts in a tree structure with both Phase 1 and Phase 2. The examiner further notes that **Fujieda** teaches **"an editing procedure to cause the computer to carry out the editing process in which a modification of one of two related file information affects other of the two related file information, including generation information"** as "If, in the three-view drawing, the content of the part column 60a or of the title columns 60b is modified, the CPU 40a detects such modification and simultaneously modifies the attribute data assigned to the corresponding model stored in the HDD 40d as well as the content shown in the attribute view. In cases where the attribute data assigned to the model has been modified, the part column 60a and title columns 60b of the three-view drawing and also the display content of the attribute view are simultaneously modified" (Paragraphs 121-122), and "If, in a PDM configuration view shown in FIG. 10, trial manufacture of "Rear Suspension", for example, is requested, the CPU 40a judges that a transition of phases has occurred. Accordingly, the CPU registers the bulk data of the rear suspension in the HDD 40d as phase-#1 bulk data, prohibits modification or revision of the bulk data, and sets the status of the bulk data to "Master". Subsequently, the CPU 40a copies the phase-#1 bulk data of the rear suspension to a predetermined area of the HDD 40d and sets the copy as phase #2. All subsequent revisions are made with respect to the phase-#2 data" (Paragraphs 146-147).

Fujieda does not explicitly teach:

B) a procedure to cause the computer to store icon data indicating file information in a second storage; and

E) a control procedure to cause the computer to create and display icon data related to the generation information to be displayed by combining the font information stored in the first storage and the icon data stored in the second storage.

Weinberg, however, teaches **"a procedure to cause the computer to store icon data indicating file information in a second storage"** as "A recursive layout method is then applied which uses the parent-child node relationships, as such relationships exist within the tree, to spatially position the nodes (represented as respective icons within the map)" (Column 2, lines 37-41) and "As generally illustrated by FIGS. 3 and 4, different icons are used to represent the different URL types when the nodes are viewed in a sufficiently zoomed-in mode" (Column 8, lines 51-53, Figures 3-4) and **"a control procedure to cause the computer to create and display icon data related to the generation information to be displayed by combining the font information stored in the first storage and the icon data stored in the second storage"** as "A recursive layout method is then applied which uses the parent-child node relationships, as such relationships exist within the tree, to spatially position the nodes (represented as respective icons within the map)" (Column 2, lines 37-41), "As generally illustrated by FIGS. 3 and 4, different icons are used to represent the different URL types when the nodes are viewed in a sufficiently zoomed-in mode" (Column 8, lines 51-53, Figures 3-4), and "FIG. 21 illustrates a screen display...can selectively display the following: new URLs and links, modified URLs, deleted URLs and links, and unmodified URLs and links" (Column 30, lines 28-38).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Weinberg's** would have allowed **Fujieda's** to provide a method for improving graphical navigation through the visualization of icons, as noted by **Weinberg** (Column 1, lines 46-60).

Regarding claim 17, **Fujieda** further teaches a computer-readable storage medium comprising:

A) an input procedure to cause the computer to detect an input to the computer, including the instruction (Paragraphs 145-150, Figure 10); and

B) said control procedure causing the computer to display the relationships of selected icon data with emphasis when the input controller detects an input selecting the selected icon data from the displayed icon data (Paragraphs 145-150, Figure 10).

The examiner notes that **Fujieda** teaches **"an input procedure to cause the computer to detect an input to the computer, including the instruction"** as "The PDM configuration view screen shows the latest phase, but it is also possible to display a plurality of phases on screen at the same time by executing a predetermined command etc. through operation of the input device 41. Such a screen is shown in FIG. 11, by way of example. In the illustrated example, "Rear Suspension Ph1" relating to phase #1 and "Rear Suspension Ph2" relating to phase #2 are shown on the same screen. This display screen permits the part or unit of a previous phase to be looked up with ease" (Paragraphs 149-150). The examiner further notes that Figure 10 clearly shows that as a result of a user action to the rear-suspension button in interface 70, interfaces 71 and 72 appear. The examiner further notes that **Fujieda** teaches **"said control procedure causing the computer to display the relationships of selected icon data with emphasis when the input controller detects an input selecting the selected icon data from the displayed icon data"** as "The PDM configuration view screen shows the latest phase, but it is also possible to display a plurality of phases on screen at the same time by executing a predetermined command etc. through operation of the input device 41. Such a screen is shown in FIG. 11, by way of example. In the illustrated example, "Rear Suspension Ph1" relating to phase #1 and "Rear Suspension Ph2" relating to phase #2 are shown on the same screen. This display screen permits the part or unit of a previous phase to be looked up with ease" (Paragraphs 149-150). The examiner further notes that Figure 10 clearly shows that as a result of a user action to the rear-suspension button in interface 70, interfaces 71 and 72 appear.

Regarding claim 18, **Fujieda** further teaches a computer readable storage medium comprising:

A) wherein the control procedure causes the computer to display the relationships of the file information corresponding to the icon data by lines connecting related icon data (Paragraphs 145-150, Figure 10).

The examiner further notes that **Fujieda** teaches **"wherein the control procedure causes the computer to display the relationships of the file information corresponding to the icon data by lines connecting related icon data"** as "The PDM configuration view screen shows the latest phase, but it is also possible to display a plurality of phases on screen at the same time by executing a predetermined command etc. through operation of the input device 41. Such a screen is shown in FIG. 11, by way of example. In the illustrated example, "Rear Suspension Ph1" relating to phase #1 and "Rear Suspension Ph2" relating to phase #2 are shown on the same screen. This display screen permits the part or unit of a previous phase to be looked up with ease" (Paragraphs 149-150). The examiner further notes that Figure 10 clearly shows a tree structure with respect to phases 1 and 2, both of which contain lines depicting various relationships.

Regarding claim 20, **Fujieda** further teaches a computer readable storage medium comprising:

A) a procedure to cause the computer to acquire a CAD program and/or the file information via one or more networks (Paragraphs 42 and 65, Figure 1).

The examiner notes that **Fujieda** teaches **"a procedure to cause the computer to acquire a CAD program and/or the file information via one or more networks"** as "When bulk data of a certain model is necessary, an inquiry is made with respect to the first server 1, and the corresponding meta-data and decryption key are acquired and transmitted to the terminal which has made the request. Accordingly, bulk data, which has a vast amount of information, need not be transferred from the second server to the first server 1, and thus the network can be prevented from being overloaded" (Paragraph 65). The examiner further wishes to state that Figure 1 clearly shows various terminals 3-1, 3-2, and 3-3 having network access to CAD material located on servers 1 and 2.

Regarding claim 21, **Fujieda** further teaches a system comprising:

A) wherein the processing unit carries out the editing process in response to an input from the input device (Paragraphs 121-122, and 146-148, Figures 7, and 9-10).

The examiner notes that **Fujieda** teaches **"wherein the processing unit carries out the editing process in response to an input from the input device"** as "If, in the three-view drawing, the content of the part column 60a or of the title columns 60b is modified, the CPU 40a detects such modification and simultaneously modifies the attribute data assigned to the corresponding model stored in the HDD 40d as well as the content shown in the attribute view. In cases where the attribute data assigned to the model has been modified, the part column 60a and title columns 60b of the three-view drawing and also the display content of the attribute view are simultaneously modified" (Paragraphs 121-122), and "If, in a PDM configuration view shown in FIG. 10, trial manufacture of "Rear Suspension", for example, is requested, the CPU 40a judges that a transition of phases has occurred. Accordingly, the CPU registers the bulk data of the rear suspension in the HDD 40d as phase-#1 bulk data, prohibits modification or revision of the bulk data, and sets the status of the bulk data to "Master". Subsequently, the CPU 40a copies the phase-#1 bulk data of the rear suspension to a predetermined area of the HDD 40d and sets the copy as phase #2. All subsequent revisions are made with respect to the phase-#2 data" (Paragraphs 146-147).

Regarding claim 22, **Fujieda** further teaches a system comprising:

A) wherein the processing unit carries out the editing process in response to an input from the input device (Paragraphs 121-122, and 146-148, Figures 7, and 9-10).

The examiner notes that **Fujieda** teaches **"wherein the processing unit carries out the editing process in response to an input from the input device"** as "If, in the three-view drawing, the content of the part column 60a or of the title columns 60b is modified, the CPU 40a detects such modification and simultaneously modifies the attribute data assigned to the corresponding model stored in the HDD 40d as well as the content shown in the attribute view. In cases where the attribute data assigned to

the model has been modified, the part column 60a and title columns 60b of the three-view drawing and also the display content of the attribute view are simultaneously modified" (Paragraphs 121-122), and "If, in a PDM configuration view shown in FIG. 10, trial manufacture of "Rear Suspension", for example, is requested, the CPU 40a judges that a transition of phases has occurred. Accordingly, the CPU registers the bulk data of the rear suspension in the HDD 40d as phase-#1 bulk data, prohibits modification or revision of the bulk data, and sets the status of the bulk data to "Master". Subsequently, the CPU 40a copies the phase-#1 bulk data of the rear suspension to a predetermined area of the HDD 40d and sets the copy as phase #2. All subsequent revisions are made with respect to the phase-#2 data" (Paragraphs 146-147).

Regarding claim 23, **Fujieda** teaches a method comprising:

A) storing a plurality of file information including respective generation information of each file information (Paragraphs 143-144, 146-150, Figures 9-10);

B) each file information having different generations before and after a modification by an editing process (Paragraphs 143-144, 146-150, Figures 9-10);

C) interrelating the stored file information, based upon the respective generation information (Paragraphs 121-122, 143-144, 146-150, Figures 7, and 9-10); and

E) displaying the interrelationships of the stored file information using the respective corresponding icons (Paragraphs 143-144, 146-150, Figures 9-10);

F) wherein a modification of one of two related file information by the editing process affects other of the two related file information, including the generation information (Paragraphs 121-122, and 146-148, Figures 7, and 9-10).

The examiner notes that **Fujieda** teaches **"storing a plurality of file information including respective generation information of each file information"** as "In this embodiment, different phases are set for a model and the version number is assigned to each phase, thus making it possible to manage the model by the phase. In the illustrated example, a model A has three kinds of phase, phases #1 to #3, and the version number starting with "1" is assigned to each phase. By thus generating an independent version number for each phase for the management of the model, it is

possible to acquire target data by using the phase as a clue" (Paragraphs 143-144) and "The PDM configuration view screen shows the latest phase, but it is also possible to display a plurality of phases on screen at the same time by executing a predetermined command etc. through operation of the input device 41. Such a screen is shown in FIG. 11, by way of example. In the illustrated example, "Rear Suspension Ph1" relating to phase #1 and "Rear Suspension Ph2" relating to phase #2 are shown on the same screen. This display screen permits the part or unit of a previous phase to be looked up with ease" (Paragraphs 149-150). The examiner further wishes to state that Figure 10 of **Fujieda** clearly shows multiple versions of the same part (Rear Cushion 1 in Phase 1 and Rear Cushion 2 in Phase 2). The examiner further notes that **Fujieda** teaches **"each file information having different generations before and after a modification by an editing process"** as "In this embodiment, different phases are set for a model and the version number is assigned to each phase, thus making it possible to manage the model by the phase. In the illustrated example, a model A has three kinds of phase, phases #1 to #3, and the version number starting with "1" is assigned to each phase. By thus generating an independent version number for each phase for the management of the model, it is possible to acquire target data by using the phase as a clue" (Paragraphs 143-144) and "The PDM configuration view screen shows the latest phase, but it is also possible to display a plurality of phases on screen at the same time by executing a predetermined command etc. through operation of the input device 41. Such a screen is shown in FIG. 11, by way of example. In the illustrated example, "Rear Suspension Ph1" relating to phase #1 and "Rear Suspension Ph2" relating to phase #2 are shown on the same screen. This display screen permits the part or unit of a previous phase to be looked up with ease" (Paragraphs 149-150). The examiner further wishes to state that Figure 10 of **Fujieda** clearly shows multiple versions of the same part (Rear Cushion 1 in Phase 1 and Rear Cushion 2 in Phase 2). The examiner further notes that **Fujieda** teaches **"interrelating the stored file information, based upon the respective generation information"** as "If, in the three-view drawing, the content of the part column 60a or of the title columns 60b is modified, the CPU 40a detects such modification and simultaneously modifies the attribute data assigned to the

corresponding model stored in the HDD 40d as well as the content shown in the attribute view. In cases where the attribute data assigned to the model has been modified, the part column 60a and title columns 60b of the three-view drawing and also the display content of the attribute view are simultaneously modified" (Paragraphs 121-122), "In this embodiment, different phases are set for a model and the version number is assigned to each phase, thus making it possible to manage the model by the phase. In the illustrated example, a model A has three kinds of phase, phases #1 to #3, and the version number starting with "1" is assigned to each phase. By thus generating an independent version number for each phase for the management of the model, it is possible to acquire target data by using the phase as a clue" (Paragraphs 143-144), and "The PDM configuration view screen shows the latest phase, but it is also possible to display a plurality of phases on screen at the same time by executing a predetermined command etc. through operation of the input device 41. Such a screen is shown in FIG. 11, by way of example. In the illustrated example, "Rear Suspension Ph1" relating to phase #1 and "Rear Suspension Ph2" relating to phase #2 are shown on the same screen. This display screen permits the part or unit of a previous phase to be looked up with ease" (Paragraphs 149-150). The examiner further notes that **Fujieda** teaches **"displaying the interrelationships of the stored file information using the respective corresponding icons"** as "In this embodiment, different phases are set for a model and the version number is assigned to each phase, thus making it possible to manage the model by the phase. In the illustrated example, a model A has three kinds of phase, phases #1 to #3, and the version number starting with "1" is assigned to each phase. By thus generating an independent version number for each phase for the management of the model, it is possible to acquire target data by using the phase as a clue" (Paragraphs 143-144) and "The PDM configuration view screen shows the latest phase, but it is also possible to display a plurality of phases on screen at the same time by executing a predetermined command etc. through operation of the input device 41. Such a screen is shown in FIG. 11, by way of example. In the illustrated example, "Rear Suspension Ph1" relating to phase #1 and "Rear Suspension Ph2" relating to phase #2 are shown on the same screen. This display screen permits the part or unit of a

previous phase to be looked up with ease" (Paragraphs 149-150). The examiner further wishes to state that Figure 10 of **Fujieda** clearly shows the relationship of the various parts in a tree structure with both Phase 1 and Phase 2. The examiner further notes that **Fujieda** teaches **"wherein a modification of one of two related file information by the editing process affects other of the two related file information, including the generation information"** as "If, in the three-view drawing, the content of the part column 60a or of the title columns 60b is modified, the CPU 40a detects such modification and simultaneously modifies the attribute data assigned to the corresponding model stored in the HDD 40d as well as the content shown in the attribute view. In cases where the attribute data assigned to the model has been modified, the part column 60a and title columns 60b of the three-view drawing and also the display content of the attribute view are simultaneously modified" (Paragraphs 121-122), and "If, in a PDM configuration view shown in FIG. 10, trial manufacture of "Rear Suspension", for example, is requested, the CPU 40a judges that a transition of phases has occurred. Accordingly, the CPU registers the bulk data of the rear suspension in the HDD 40d as phase-#1 bulk data, prohibits modification or revision of the bulk data, and sets the status of the bulk data to "Master". Subsequently, the CPU 40a copies the phase-#1 bulk data of the rear suspension to a predetermined area of the HDD 40d and sets the copy as phase #2. All subsequent revisions are made with respect to the phase-#2 data" (Paragraphs 146-147).

Fujieda does not explicitly teach:

D) corresponding an icon for each file information.

Weinberg, however, teaches **"corresponding an icon for each file information"** as "A recursive layout method is then applied which uses the parent-child node relationships, as such relationships exist within the tree, to spatially position the nodes (represented as respective icons within the map)" (Column 2, lines 37-41) and "As generally illustrated by FIGS. 3 and 4, different icons are used to represent the different URL types when the nodes are viewed in a sufficiently zoomed-in mode" (Column 8, lines 51-53, Figures 3-4).deleted URLs and links, and unmodified URLs and links" (Column 30, lines 28-38).

It would have been obvious to one of ordinary skill in the art at the time the
invention was made to combine the teachings of the cited references because teaching
Weinberg's would have allowed **Fujieda's** to provide a method for improving graphical
navigation through the visualization of icons, as noted by **Weinberg** (Column 1, lines
46-60).

7.   Claims 4, 9, 14, and 19 are rejected under 35 U.S.C. 103(a) as being
unpatentable over **Fujieda** (U.S. PGPUB 2001/0007997) in view of **Weinberg et al.**
(U.S. Patent 6,144,962) as applied to claims 1-3, 5-8, 10-13, 15-18, and 20-23 and
further in view of **Miller et al.** (U.S. Patent 6,661,437).

8.   Regarding claim 4, **Fujieda** and **Weinberg** do not explicitly teach a system
comprising:

A) wherein a kind, width and color of the lines connecting the icon data are set
differently for each generation.

Miller, however, teaches **"wherein a kind, width and color of the lines
connecting the icon data are set differently for each generation"** as "In addition,
both menu entry and exit points and previously selected menu items are identified (e.g.,
by dashed lines or dashed features or by highlighting, coloring, shading including three
dimensional shading, or hatching" (Column 5, lines 20-23).

It would have been obvious to one of ordinary skill in the art at the time the
invention was made to combine the teachings of the cited references because teaching
Miller's would have allowed **Fujieda's** and **Weinberg's** to provide a method for
improving the ability for users to readily see the menu navigation of hierarchical tree
structures, as noted by **Miller** (Column 5, lines 24-25).

Regarding claim 9, **Fujieda** and **Weinberg** do not explicitly teach a system
comprising:

A) wherein a kind, width and color of the lines connecting the icon data are set
differently for each generation.

Miller, however, teaches **"wherein a kind, width and color of the lines
connecting the icon data are set differently for each generation"** as "In addition,

both menu entry and exit points and previously selected menu items are identified (e.g., by dashed lines or dashed features or by highlighting, coloring, shading including three dimensional shading, or hatching" (Column 5, lines 20-23).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Miller's** would have allowed **Fujieda's** and **Weinberg's** to provide a method for improving the ability for users to readily see the menu navigation of hierarchical tree structures, as noted by **Miller** (Column 5, lines 24-25).

Regarding claim 14, **Fujieda** and **Weinberg** do not explicitly teach a computer-readable storage medium comprising:
A) wherein a kind, width and color of the lines connecting the icon data are set differently for each generation.

Miller, however, teaches "**wherein a kind, width and color of the lines connecting the icon data are set differently for each generation**" as "In addition, both menu entry and exit points and previously selected menu items are identified (e.g., by dashed lines or dashed features or by highlighting, coloring, shading including three dimensional shading, or hatching" (Column 5, lines 20-23).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references because teaching **Miller's** would have allowed **Fujieda's** and **Weinberg's** to provide a method for improving the ability for users to readily see the menu navigation of hierarchical tree structures, as noted by **Miller** (Column 5, lines 24-25).

Regarding claim 19, **Fujieda** and **Weinberg** do not explicitly teach a computer-readable storage medium comprising:
A) wherein a kind, width and color of the lines connecting the icon data are set differently for each generation.

Miller, however, teaches "**wherein a kind, width and color of the lines connecting the icon data are set differently for each generation**" as "In addition,

both menu entry and exit points and previously selected menu items are identified (e.g.,
by dashed lines or dashed features or by highlighting, coloring, shading including three
dimensional shading, or hatching" (Column 5, lines 20-23).

It would have been obvious to one of ordinary skill in the art at the time the
invention was made to combine the teachings of the cited references because teaching
Miller's would have allowed **Fujieda's** and **Weinberg's** to provide a method for
improving the ability for users to readily see the menu navigation of hierarchical tree
structures, as noted by **Miller** (Column 5, lines 24-25).

Response to Arguments

9.   Applicant's arguments with respect to claim 1-23 have been considered but are
moot in view of the new ground(s) of rejection.

Conclusion

10.   The prior art made of record and not relied upon is considered pertinent to
applicant's disclosure.

U.S. Patent 6,557,002 issued to **Fujieda et al.** on 29 April 2003. The subject
matter disclosed therein is pertinent to that of claims 1-23 (e.g., methods to view varying
versions of parts in a CAD system efficiently).

U.S. Patent 6,944,515 issued to **Nakajima et al.** on 13 September 2005. The
subject matter disclosed therein is pertinent to that of claims 1-23 (e.g., methods to view
varying versions of parts in a CAD system efficiently).

U.S. PGPUB 2002/0080194 issued to **Fujieda et al.** on 27 June 2002. The
subject matter disclosed therein is pertinent to that of claims 1-23 (e.g., methods to view
varying versions of parts in a CAD system efficiently).

U.S. Patent 6,304,790 issued to **Nakamura et al.** on 16 October 2001. The
subject matter disclosed therein is pertinent to that of claims 1-23 (e.g., methods to view
varying versions of parts in a CAD system efficiently).

U.S. Patent 7,016,922 issued to **Sahoo** on 21 March 2006. The subject matter
disclosed therein is pertinent to that of claims 1-23 (e.g., methods to view varying
versions of parts in a CAD system efficiently).

U.S. Patent 6,760,735 issued to **Rusche** on 06 July 2004. The subject matter disclosed therein is pertinent to that of claims 1-23 (e.g., methods to view varying versions of parts in a CAD system efficiently).

U.S. PGPUB 2003/00218634 issued to **Kuchinsky et al.** on 27 November 2003. The subject matter disclosed therein is pertinent to that of claims 1-23 (e.g., methods to view varying versions of parts in a CAD system efficiently).

U.S. Patent 4,862,376 issued to **Ferriter et al.** on 29 August 1989. The subject matter disclosed therein is pertinent to that of claims 1-23 (e.g., methods to view varying versions of parts in a CAD system efficiently).

U.S. Patent 6,895,560 issued to **Das** on 24 May 2005. The subject matter disclosed therein is pertinent to that of claims 1-23 (e.g., methods to view varying versions of parts in a CAD system efficiently).

U.S. Patent 7,047,237 issued to **Suzuki et al.** on 16 May 2006. The subject matter disclosed therein is pertinent to that of claims 1-23 (e.g., methods to view varying versions of parts in a CAD system efficiently).

The examiner notes that the **Fujieda** patent (U.S. Patent 6,577,002 displays analogous subject matter that is commonly owned by the assignee of the instant application.

11.   Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

12.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mahesh Dwivedi whose telephone number is (571) 272-2731. The examiner can normally be reached on Monday to Friday 8:20 am – 4:40 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Vo can be reached (571) 272-3642. The fax number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mahesh Dwivedi
Patent Examiner
Art Unit 2168

TIM VO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

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